Application No. 09/591,577

Reply to Office Action of April 17, 2007

Remarks

Claims 133-139 and 152-159 are currently pending in the Application. Claims 133-138 have been amended. New claims 152-159 have been added.

Support for the claim amendments to claims 133-139 and for new claims 152-159 may be found, for example, in the specification at paragraphs 68, 91, 85, 116, 161, 167, 171 and in Figs. 4, 12A, 12B, 13, 14 and 26B. Accordingly, no new matter has been added to the application by the foregoing claims.

References made herein to the "Specification" refer to the Substitute Specification submitted with the Declaration of Douglas J. Ryder on July 25, 2003. Where appropriate, citations are made with respect to specific paragraph numbers of the Substitute Specification.

Applicants and the undersigned thank Examiner Rhetta for the courtesies extended during a personal interview conducted on July 10, 2007, to discuss the present application and Office Action. During the interview, the prior art of record, Applicants' reasons as to why the pending claims overcome the Examiner's prior art rejections and how such claims are adequately supported by the specification were discussed.

As a result of the interview, the Examiner indicated that the arguments with respect to the independent claims were understood, but reserved the right to review Applicants' arguments in detail upon submission of a formal response.

Claim Rejection-§ 112, First Paragraph

The Examiner has rejected claims 133-139 under 35 U.S.C §112, first paragraph, for failing to comply with the written description requirement. Applicant respectfully traverses this rejection. First, Applicants respectfully submit that (a) the Examiner has not met the burden for establishing a *prima facie* case for lack of written description by clear and convincing evidence; and (b) it is unclear to Applicants which aspects of the claims appear to the Examiner to be unsupported by the specification.

A. Standard for § 112, First Paragraph Rejections

Section 2163 of the MPEP explicitly states:

A description as filed is <u>presumed to be adequate</u>, unless or until sufficient evidence or reasoning to the contrary has been presented by the examiner to rebut the presumption... The examiner has the initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. Wertheim, 541 F.2d at 263, 191 USPQ at 97. In rejecting a claim, the examiner must set forth express findings of fact regarding the above analysis which support the lack of written description conclusion.

As such, the Examiner must overcome this presumption by clearly:

- (A) Identifing the claim element at issue; and
- (B) Establishing a prima facie case by providing reasons why a person skilled in the art at the time the application was filed would not have recognized that the inventor was in possession of the invention as claimed in view of the disclosure of the application as filed. A general allegation of "unpredictability in the art" is not a sufficient reason to support a rejection for lack of adequate written description.

In the Office Action the Examiner has only provided a blanket objection reciting nearly the entire claim verbatim. The Examiner argues that the disclosure:

does not disclose retrieving heuristic rules, wherein said heuristic rules have been pre-defined prior to accessing said plurality of consumer records transaction records; retrieving at least one target market characteristic that has been selected at the discretion of an advertiser; applying said pre-defined heuristic rules to said plurality of consumer transaction records and demographic information records to determine inferred market characteristics of the consumer and determining applicability of an advertisement to at least one of the consumers by correlating the inferred market characteristics obtained by the application of the pre-defined heuristic rules with the target market characteristics selected by the advertiser. The specification also does not disclose the consumer having more than one market characteristics.

Respectfully, Applicants submit that the Examiner has not met the needed burden. It is evident from this long and non-specified rejection that the Examiner has not provided sufficient evidence, including any express findings of fact, to indicate that the objected-to claim language is not supported in the Applicants' specification. At most, the Examiner generally alleges a lack of support essentially reciting the entire claim, with no explanation. This is insufficient under the MPEP, wherein it is abundantly clear that the Examiner has the burden of explaining specifically which claim elements are unsupported and why the disclosure lacks such support. The Examiner, having failed to do this, leaves Applicants unable to thoroughly respond due to a lack of knowledge of what the Examiner believes to be unsupported.

Recent case law also supports the assertion that blanket rejections of claims are improper. In Hyatt v. Dudas, the court notes that "section 2163.04(I) expressly instructs the examiner to specify which claim limitation is lacking adequate support in the written description." (Hyatt v. Dudas, 2007 U.S. App. LEXIS 15350 (Fed. Cir. 2007)). As stated above, in the current application the Examiner has simply restated the majority of the claim and, without further explanation, stated that the claim has insufficient support.

Accordingly, to the extent the Examiner's concerns are not adequately addressed by the following discussion, Applicants respectfully request that the Examiner meet her burden and clearly identify all claim language at issue and provide the necessary evidence, including express findings of fact, supporting why the Examiner believes the objected-to claim elements are not supported by Applicants' specification.

B. Support for Claim Elements

Since the Examiner did not give adequate support for the rejection, Applicants are forced to respond to the entire claim language to plausibly address the substance of the Examiner's rejection. As such, Applicants have identified at least some of the portions of the disclosure that support the claim language.

1. Retrieving and Applying Pre-defined Heuristic Rules

With respect to heuristic rules, the elements in claim 133 recite "said heuristic rules have been pre-defined prior to accessing said plurality of consumer transaction records," and "applying said pre-defined heuristic rules to said plurality of consumer transaction records to generate inferred transaction characteristics of the consumers." The gist of these claim elements is that the heuristic rules were not developed instantly, but were developed through a previous heuristic process. In several places in the disclosure, the pre-defined nature of heuristic rules is discussed. For example, the specification specifically states:

FIG. 12A illustrates sets of logical heuristic rules that form part of the heuristic rules 460. In a preferred embodiment, logical heuristic rules are obtained from sociological or psychological studies." (Specification ¶116. Lines 1-3).

As to the application of these pre-defined heuristic rules, the Examiner is unclear as to which part of the claim element the Examiner believed to be unsupported. Clear support for the entire claim element, however, can be found in Fig. 4. Fig. 4 shows heuristic rules 460 being applied to consumer transaction records (subscriber selection data 410, household viewing habits 495 and household interest profile 480) in the subscriber characterization system 400. Therefore, Applicants submit that the concepts of retrieving and applying pre-defined heuristic rules are adequately supported in the disclosure.

2. Retrieving Discretionary Characteristics

The concept of "retrieving at least one target consumer characteristic from an advertiser that has been selected at the discretion of the advertiser," as recited in claim 133 indicates that an advertiser selects a target consumer characteristic at the advertiser's discretion. Support for this element in the disclosure can be found in paragraphs 161 and 159, respectively. Paragraph 161 describes target consumer characteristics being discretionary:

[b]ecause the ad characterization vector can have target profiles which are not representative of actual consumers of the product, the ad characterization vector can be considered to have discretionary elements." (Specification ¶161, lines 1-6, emphasis added).

The selection of these characteristics by an advertiser is described in paragraph 159:
"[b]y targeting present purchasers of ALPHABITS and WHEATIES, the advertiser can attempt to sway those purchasers over to the Kellogg brand." (Specification ¶159, lines 6-8). This exemplifies an advertiser selecting "at least one target consumer characteristic" (purchased ALPHABITS and WHEATIES). Since an advertiser could choose whatever characteristic they desired, such an element is a discretionary element.

3. Determining the Applicability of an Advertisement

The final claim element believed to be rejected based under 35 U.S.C §112, first paragraph, now recites "determining applicability of an advertisement to the at least one consumers by correlating the inferred consumer characteristics with the target market characteristics selected at the discretion of the advertiser." Support for this claim element may be found in Fig. 26B, and paragraph 68 and paragraph 171. Fig. 26B shows the correlation process. Paragraph 68 recites:

[t]he advertisers may provide national advertisements to a Secure Correlation Server 305 that may match the advertisements to different subscribers 317. By providing the ability to match advertisements to demographic groups ... and to individual subscribers ... using the correlation process, the present invention increases in advertising effectiveness. (Specification ¶68, Lines 2-7, emphasis added).

Additionally paragraph 171 recites:

"Application of a correlation process ... results in a demographic correlation 2356 and a product correlation 2358 which can be returned to advertisement records 2340. In a preferred embodiment, advertiser 2044 uses product correlation 2358 and demographic correlation 2356 to determine the applicability of the advertisement and to determine if it is worth purchasing the opportunity." (Specification ¶171, Lines 1-4).

Applicants believe these are the only elements to which the Examiner has specifically pointed as lacking sufficient written description. Accordingly, for at least the reasons described above, Applicants respectfully submit that the disclosure provides a written description sufficient to enable one skilled in the art to make and use the invention recited in all pending claims. To

the extent the Examiner believes other elements are lacking in written description, Applicants respectfully reiterate their request for clarification of the Examiner's concerns. Reconsideration and withdrawal of the Examiner's §112, first paragraph rejections of claims 133-139 are respectfully requested.

Claim Rejection-§ 112, Second Paragraph

Claims 135-139 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Examiner states that "claims 135-139 recite "the method of claim 0."

Claims 135 – 138 have been amended to recite "the method of claim 133." Accordingly, each of claims 135-139 is now properly dependent. Reconsideration and withdrawal of the Examiner's §112, second paragraph rejections are respectfully requested.

Claim Rejection-§ 102(e)

Claims 133-139 are rejected under 35 U.S.C. § 102 (e) as being anticipated by U.S. Patent No. 6,463,585 to Hendricks et al. ("Hendricks").

Hendricks teaches a system for allowing targeted advertising to be directed to television terminals connected to an operations center or cable headend via a switched digital video network. Supplemental feeder channels are used to carry a plurality of advertisements that can be inserted into a viewing channel during an advertisement opportunity. Viewers are arranged according to a group assignment plan based upon factors such as area of dominant influence, ZIP code, and household income. A switching plan is used to determine whether to substitute the existing advertisement with an advertisement from a feeder channel, and if so, which advertisement should be substituted. Hendricks describes the components responsible for selecting advertisements based upon viewer-based data only as "correlation algorithms" which

causes a "correlation of demographic information with buy information." See Hendricks, col. 44, Lines 7-23, col. 69, line 61–col. 76, line 11. Hendricks is silent with respect to how the correlation algorithms work.

For a rejection under § 102(e) to be proper, a reference must disclose, either explicitly or inherently, <u>each and every element</u> of the claimed invention. Applicants respectfully submit that Hendricks does not teach each and every element recited in independent claim 133.

Independent claim 133, as amended, recites:

A method of identifying consumers likely to be interested in an advertisement, the method comprising:

- (a) accessing a plurality of consumer transaction records corresponding to a plurality of consumers and accessing demographic information records corresponding to at least some of the plurality of consumers;
- (b) retrieving heuristic rules, wherein said heuristic rules have been pre-defined prior to accessing said plurality of consumer transaction records and wherein said pre-defined heuristic rules have been developed through the application of at least one heuristic process;
- (c) retrieving at least one target consumer characteristic from an advertiser that has been selected at the discretion of the advertiser;
- (d) applying said pre-defined heuristic rules to said plurality of consumer transaction records to generate inferred transaction characteristics of the consumers;
- (e) generating inferred consumer characteristics of at least one of the consumers by associating the inferred transaction characteristics with a corresponding demographic information record of the at least one consumer; and(f) determining applicability of an advertisement to the at least one consumers by correlating the inferred consumer characteristics with the target market characteristics selected at the discretion of the advertiser.

Hendricks does not disclose several elements of independent claim 133.

1. Pre-Defined Heuristic Rules

Hendricks does not disclose the use of heuristic rules, let alone pre-defined heuristic rules "developed through the application of at least one heuristic process." Hendricks does teach the "correlation of demographic information with buy information." (Col. 44, lines 7-23). However, "correlation of demographic information with buy information" is not a heuristic rule that has "been pre-defined prior to accessing said plurality of consumer transaction records."

Hendricks' correlation process is neither a heuristic rule nor is it pre-defined. A simple correlation process is not the use of a heuristic rule "developed through the application of at least one heuristic process." Additionally, the correlation of demographic information with buy information as discussed in Hendricks is not pre-defined. In Hendricks, a determination is accomplished concurrently with the operation of the system, rather than having a rule which has been "pre-defined prior to accessing said plurality of consumer transaction records." It is impossible to construe an operation which has been developed during operation of a system as pre-defined. The very nature of Applicant's disclosure is that heuristic rules have been defined prior to the operation of the system. Hendricks does not teach, suggest or even hint at a heuristic rule which has been pre-defined. Additionally, Hendricks' correlation process is undefined, thereby making it unknown what specific rules, if any, are used in the correlation process.

If the Examiner has evidence within Hendricks which points to the use of pre-defined heuristic rules which have been developed through the application of at least one heuristic process, Applicants respectful request that the Examiner meet her burden by explicitly pointing out a citation of Hendricks such a teaching exists.

2. Discretionary Characteristics

Hendricks does not disclose the selection of a consumer characteristic at an advertiser's discretion. Although, the Examiner cites three specific places in Hendricks where the Examiner believes that Hendricks teaches a discretionary element, these citations do not teach the claimed element. In fact, Hendricks does not teach the claimed element anywhere. Applicants are unable to determine to what the first citation given by the Examiner refers ("col. 289-44"). The second

citation ("col. 30, lines 22-64") and the third citation ("col. 31, lines 28-55") discuss automated functions where Applicant assumes that the Examiner thinks a discretionary consumer characteristic is retrieved. The citations recite automatic processes performed by Hendricks' system wherein "priority algorithms" and similar system functions determine advertisements. This is far different than having an advertiser select consumer characteristics at the advertiser's discretion. Although not specifically cited by the Examiner, Hendricks discusses automated advertisement selection at column 4, lines 12-15: "[a] video targeting routine makes use of a viewer's demographic information and viewing habits to determine those advertisements that may be most effective when displayed to that particular viewer." Thus, Hendricks' consumer characteristics are determined by a "video targeting routine," such that Hendricks' system selects the market characteristics, not by the discretion of an advertiser. If the Examiner has evidence within Hendricks which contains the use of a discretionary element selected by the advertiser, Applicants respectful request that the Examiner explicitly point out a citation of Hendricks where this exists. Accordingly, Hendricks does not disclose all features of independent claim 133.

Similarly, new independent claim 153 recites "retrieving heuristic rules, wherein said heuristic rules have been pre-defined prior to accessing said plurality of consumer transaction records," and "retrieving at least one target consumer characteristic from an advertiser that has been selected at the discretion of the advertiser." For the same reasons discussed above with respect to independent claim 133, Hendricks does not disclose all of the features of independent claim 153.

Dependent claims 134-139, 152 and 154-159 are allowable at least by their dependency on independent claims 133 and 153, respectively.

Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully submit that the Examiner's rejections have been overcome, and that the application, including claims 133-139 and 152-159, is in condition for allowance. Reconsideration and withdrawal of the Examiner's rejections and an early Notice of Allowance are respectfully requested.

Respectfully submitted,

Date: 7/38/07 By: ___

Andrew W. Spicer Registration No. 57,420 Technology, Patents & Licensing, Inc. 2003 South Easton Road, Suite 208 Doylestown, PA 18901 267-880-1720

auch TW-

Customer No.: 27832